CHAPTER II
CHAPTER - II

TOOLS USED

In the preceding chapter, the problem was discussed. The present chapter focuses on the development, adaptation and description of the following tools:

2.1 DEVELOPMENT OF DEMOCRATIC VALUE SURVEY
2.2 ADAPTATION OF VALUE SELF-CONFRONTATION INSTRUMENT
2.3 ADAPTATION OF VALUES CLARIFYING INSTRUMENT
2.4 ADAPTATION OF VALUE-RELATED BEHAVIOUR PROBLEM DEVICE
2.5 KUNDU INTROVERSION EXTRAVERSION INVENTORY

2.1 DEVELOPMENT OF DEMOCRATIC VALUE SURVEY

In the absence of any suitable measure of democratic values, the investigator developed a DEMOCRATIC VALUE SURVEY in different phases:

2.1.1 Phase I: Derivation Of The List Of Democratic Values
2.1.2 Phase II: Decision About The Format Of The Tool
2.1.3 Phase III: Construction Of The Preliminary Draft
2.1.4 Phase IV: Draft Revision And Modification
2.1.5 Phase V: The Final Draft

2.1.1 Phase I: Derivation Of The List Of Democratic Values

In order to develop a tool to measure preferences for democratic values, the investigator consulted the PREAMBLE of Constitution and the literature on democratic values.

(1) Preamble Of Constitution:

Democracy, as a form of Government, prescribes certain ideals. India, a largest democratic country of the world,
prescribes certain ideals as reflected in the PREAMBLE of Constitution which reads as:

WE THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens:

JUSTICE, social, economic and political;
LIBERTY of thought, expression, belief, faith and worship;
Equality of status and opportunity;
and to promote among them all;
FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

The PREAMBLE of Indian Constitution tends to reveal that the four strong pillars of democracy - JUSTICE, LIBERTY, EQUALITY and FRATERNITY - are supplemented by the INDIVIDUAL DIGNITY and the NATIONAL UNITY AND INTEGRITY. These six corner-stones of the democratic system as ideals very much underlie the Indian social order.

(2) The Literature:

The literature on democracy supports these ideals. Barnes (1962) presented the implicit assumptions democracy embodies and the elements any democratic form of association contains. Appraising critically the work of Barnes, the investigator derived broadly six corresponding ideals (Table 2.1) viz, INDIVIDUAL DIGNITY, FRATERNITY, FLEXIBILITY, CO-OPERATION,
EQUALITY and JUSTICE. The idea of FLEXIBILITY partially implies Liberty. CO-OPERATION as an ideal of democracy was implicitly supported by the PREAMBLE. In addition to the six major democratic ideals reflected in the PREAMBLE of Indian Constitution, what is more deeply felt is the individual co-operation. It is so, because the milestones of Indian democracy entail for fulfilling the obligation of moral accountability to another for any kind of decision. In the words of Mookerjea (1956): "Democracy is Government by compromise in which there can be maximum co-operation with minimum frustration". Avinshilingam (1983) observed that the ideals of democracy are prevailing over the typical Indian democratic set-up and thus, resemble with the ideals prescribed by the PREAMBLE of Indian Constitution.

Table 2.1
Assumptions and Elements of a Democratic set-up and their corresponding ideals

<table>
<thead>
<tr>
<th>Assumptions:</th>
<th>Ideals:</th>
</tr>
</thead>
<tbody>
<tr>
<td>-The approach of democracy is individual rather than institutional.</td>
<td>-Individual dignity.</td>
</tr>
<tr>
<td>-Citizens can and should be treated upon a fraternal rather than a differential basis.</td>
<td>-Fraternity</td>
</tr>
<tr>
<td>-Man is perfectible.</td>
<td>-Flexibility in adjustment.</td>
</tr>
<tr>
<td>-Progress is essentially a man rather than an individual effort.</td>
<td>-Co-operation</td>
</tr>
</tbody>
</table>

Elements:
-There is sensitivity to individual differences and personal growth.
-Equality before the law.
-Equality of vote.
-Equality of opportunity

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52
In a democratic system, ideals serve as the reference points or the accepted principles which operate as the desirable standards (values) in human action. Keeping in view the ideals of a democratic society, various studies reflect democratic values in some form or the other. Dealing with the nature of democratic values, Srinivasan (1966) viewed that it indicates positive attitude towards a shared responsibility, understanding, tolerance in thinking and behaviour, equality, secularism and impartiality. Along with some values based on Indian culture and tradition, Sherry and Verma's (1972) Personal Values Questionnaire contains the democratic value which is composed of certain components such as, regards for individuality; equality of status; no discrimination on the basis of sex, language, religion, caste, colour and family status and justice.

Literature reveals that democracy can not survive in the absence of responsibility (Mookerjea, 1956). In the absence of responsibility, freedom decays (Nehru, 1954 and Mohindroo, 1978). The concept responsibility implies that of freedom and vice versa (Eliot, 1978). It tends to indicate that in the absence of responsibility, the essence of democracy i.e. freedom is lost. When there is no freedom, anarchism takes upper hand leading to disintegration of a highly diversified democratic society like India. For the national integration, thus, the individual first should be a responsible citizen. As such, it is an important value which was emphasized by Srinivasan (1966) and Solomon et al. (1972).

An examination of the democratic values presented in a cross-section of Literature on Democracy and the ideals of Indian democratic system envisaged by the PREAMBLE, gives an idea about
the total structure of democratic values. Based on the perusal of the studies and ideas of authorities on the subject, the investigator could select seven democratic values in their descending order of importance. These values are JUSTICE, LIBERTY, EQUALITY, FRATERNITY, INDIVIDUAL DIGNITY, RESPONSIBILITY and CO-OPERATION.

2.1.2 Phase II: Decision About The Format Of The Tool

The format of Democratic Value Survey was designed after The Rokeach Value Survey (1973) as (i) it can be easily administered and (ii) it can exhibit a clear preference for the values affecting the individual's decision in his day-to-day life.

2.1.3 Phase III: Construction Of The Preliminary Draft

Following the format, the investigator prepared the preliminary draft. The democratic values as derived from the PREAMBLE and literature were not placed as such. Because the accepted parameters (ideals) operate as desirable standards (values) in human action differently for different individuals. Among all the values INDIVIDUAL DIGNITY is the highest ideal to which all fundamentals of democratic society are anchored. It being the intrinsic worth of the individual is directly related to the conception of oneself. Here, the range of opinion appears to agree on the point that the individual's attitudes, values and behaviour are all governed by one's self-conceptions (Rokeach, 1973). It is, thus, the focal point in the constellation of democratic values.

The DIGNITY of the individual has a close relation
with the principle of equality. This principle to a greater extent depends upon the ideals of fraternity and justice in a democratic society with a bewildering variety of religions, languages and people. The real success of a democratic society depends on the realisation of the laws. It necessitates that everyone should be co-operative in the functioning of the total system of the nation. It ultimately enables the man to work hard in a responsible manner for the upliftment of the society and keep the unity and integrity of the nation intact.

On the basis of the above rationale, democratic values were arranged concentrically from the nucleus to the outer orbits in order of importance to them. In the preliminary draft of the Democratic Value Survey these values were arranged as follows: INDIVIDUAL DIGNITY, EQUALITY, FRATERNITY, JUSTICE, LIBERTY, RESPONSIBILITY and CO-OPERATION. In order to provide a full range of alternative of values related to social behaviour, 5 distracting values which by and large were considered opposite to democratic values and were also added to the list. The distracting values (SELF-PRESERVATION, OBEDIENCE, SERVICE, HELPFULNESS and LOYALTY) were placed after democratic values. A copy of the preliminary draft of Democratic Value Survey is enclosed with the Appendix - A1.

2.1.4 Phase IV: Draft Revision And Modification

The preliminary draft of Democratic Value Survey was modified three times.

In the first round of modification, the preliminary draft was given to ten experts in the field of education and
Observations: For better communication, most of the experts preferred values to be defined in behavioural terms. They strongly objected OBEDIENCE as a distractor of democratic values. They also viewed that SERVICE and HELPFULNESS were overlapping with each other. Self-progress and development was suggested as one of the two strong distractors of democratic values.

Changes: The changes incorporated in the Survey were as follows: (i) the values were explained in their behavioural terms, (ii) OBEDIENCE as a distractor was dropped, (iii) SELF-PROGRESS AND DEVELOPMENT was introduced as a distractor of democratic values and (iv) the distractors - SERVICE and HELPFULNESS - were changed into SERVICE FOR NEEDY AND DEPRESSED.

The values of the preliminary draft were placed in the same order in the modified draft. The copy of the modified draft has been enclosed with the Appendix - A₂.

(1) Tryout:

The modified version of the preliminary draft was administered over 40 final year pre-university class students of Pachhunga University College, Aizawl.

Observations: It was observed that (i) few students demanded meanings and explanations for different democratic values, and (ii) the term TOLERANCE was questioned as a blanket term.
Changes: (i) In order to simplify the meaning of democratic values, the first sentence of instructions i.e. "A List of Values consisting mostly of democratic values are given below" was changed into "There is a list of values most of which are democratic values like Equality and Fraternity given below". (ii) The democratic values viz, MUTUAL REGARD AND RESPECT, UNRESTRICTED SYMPATHY and RATIONALITY were changed into REGARDS FOR THE DIGNITY OF INDIVIDUAL, SYMPATHY WITH EVERYONE and OPENNESS TO REASON respectively. (iii) The value TOLERANCE was redefined as TOLERANCE FOR DIFFERENCES IN OPINIONS. The modified draft of Democratic Value Survey after incorporating the suggested changes was treated as the third draft which has been given in the Appendix-A3.

(2) Second Tryout:

This time, the third draft was administered over a 120 final year pre-university class students of Pachhunga University College (N=80) and Ziritiri Womens' College (N=40) in Aizawl.

Observations: (i) Most of the students asked to differentiate between "progress" and "development". (ii) Out of all the students, nearly 30 percent of students were found assigning same ranks to different values.

Changes: (i) The distracting value SELF-PROGRESS AND DEVELOPMENT was retained in the form of SELF-PROGRESS. (ii) Instructions were made more clear with additional information i.e. "Every Value has to be assigned a separate rank".

2.1.5 Phase V: The Final Draft

On the basis of changes made over the third draft, the
Democratic Value Survey was finalized.

(1) Description Of The Democratic Value Survey:

The final draft of Democratic Value Survey consists of seven democratic values (REGARDS FOR THE DIGNITY OF INDIVIDUAL, EQUALITY OF STATUS AND OPPORTUNITY, SYMPATHY WITH EVERYONE, OPENNESS TO REASON, TOLERANCE FOR DIFFERENCES IN OPINIONS, RESPONSIBILITY and CO-OPERATIVE DECISION-MAKING) and four distractors (CULTURAL PRESERVATION, SERVICE FOR NEEDY AND DEPRESSED, LOYALTY TO AUTHORITY and SELF-PROGRESS). A copy of the final draft has been enclosed with the Appendix - A.

(2) Reliability:

The final copy of the DEMOCRATIC VALUE SURVEY was administered over 35 final year pre-university class students of Pachhunga University college, Aizawl in order to obtain the stability measure for each of the eleven values over a gap of one week. The test-retest reliability for each value was obtained separately through rank-order correlation method (Garrett et al., 1985). The reliability coefficients corresponding to the values have been given as follows:

Test-retest Reliability Coefficients (N=35)

<table>
<thead>
<tr>
<th>Sn.no.</th>
<th>Values</th>
<th>Reliability coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Regards for the dignity of individual</td>
<td>.90</td>
</tr>
<tr>
<td>2.</td>
<td>Equality of status and opportunity</td>
<td>.90</td>
</tr>
<tr>
<td>3.</td>
<td>Sympathy with everyone</td>
<td>.97</td>
</tr>
<tr>
<td>4.</td>
<td>Openness to reason</td>
<td>.90</td>
</tr>
<tr>
<td>5.</td>
<td>Tolerance for differences in opinions</td>
<td>.92</td>
</tr>
<tr>
<td>6.</td>
<td>Responsibility</td>
<td>.93</td>
</tr>
<tr>
<td>7.</td>
<td>Co-operative decision-making</td>
<td>.89</td>
</tr>
<tr>
<td>8.</td>
<td>Cultural preservation</td>
<td>.86</td>
</tr>
<tr>
<td>9.</td>
<td>Service for needy and depressed</td>
<td>.80</td>
</tr>
<tr>
<td>10.</td>
<td>Loyalty to authority</td>
<td>.95</td>
</tr>
<tr>
<td>11.</td>
<td>Self-progress</td>
<td>.90</td>
</tr>
</tbody>
</table>
(3) Scoring:

Each value in the Democratic Value Survey is required to be ranked in order of its importance as a guiding principle in one's Life. Following conventional scoring procedure, the lower the number which the subjects ascribe to a given value, the more importance is presumed to be attributed to it. The possible ranks ranges, thus, are 1 through 11 for the total 11 values.

In order to employ parametric test like ANCOVA, the ranks \( Y \) are transformed into normalized scores \( X \) by the help of C-scale values (8,7,7,6,5,5,5,4,3,3 and 2) with a mean of 50 and a standard deviation of 5 (Guilford, 1954). The obtained normalized scores, thus, range from 35 to 65 with the help of formula \[ X=5(Y-5) + 50 \] when applied to each one of the ranks.

(4) Verbal Depiction Of Democratic Values:

The seven democratic values as placed in the order of their descending importance have been described in this section.

**Regards for the dignity of individual**: It reflects the individual dignity in action. It upholds the individual with the idea that no man is inferior or no man is superior and no man is slave or no man is master. In other words, it refers to mutual exchange of regards and respect with each other irrespective of race, caste or creed and socio-economic status.

**Equality of status and opportunity**: As a democratic value, equality of status and opportunity implies equal chance for all getting equal treatments under equal circumstances to attain any level one is capable of for adequate means of
livelihood; enjoyment of leisure; participation in social festivals; educational and employment opportunities, universal adult franchise and protection by law without any hindrance on the grounds of race, region, religion, caste, colour, creed, culture, position and sex.

Sympathy with everyone: The ideal of "Fraternity" implies the feeling of universal brotherhood among all the people. As an ideal it operates in the form of "Sympathy with everyone" which refers to the feeling of compassion without any boundary. It implies the feeling of oneness with all existence for the good of all mankind or the sharing of the feelings of others in sorrows or happiness, sufferings or joys and misfortunes or affluence.

Openness to reason: As a democratic value, openness to reason refers to the state of being fair, just and moderate but not absurd in one's demand in accordance with reason. It is that aspect of human personality which enables the individual to survey and assess comprehensively the various possibilities of different actions to make wise and independent choice.

Tolerance for differences in opinions: It implies that one should not hurt others' sentiments no matter what kind of opinion one may have pertaining to mode of worship or religious dogmas. It stands for showing forbearance towards the opinions of others being free from bigotry, racial or religious prejudice. Of course, it does not mean endowment of all moral principles and values, rather extension of toleration to the views of the people of all faiths and beliefs. Tolerance is, thus, based on the convictions that each individual is subject to certain
restrictions in the interest of the similar rights of others and he should be free to pursue happiness in his/her own way without being treated as an antisocial element.

**Responsibility:** In order to maintain the unity and integrity of a nation it is primarily essential for building up a society where everybody is aware of their responsibilities. Unless efforts are made by individuals themselves to be responsible citizens, it would be impossible to achieve such a great task in spite of any other excellent advantage the society may have.

**Co-operative decision-making:** In a democratic set-up, taking decisions in co-operation with other fellow beings is essential and indispensable for better and smooth functioning of democracy.

### 2.2 ADAPTATION OF VALUE SELF-CONFRONTATION INSTRUMENT

The self-confrontation strategy was originally developed by Rokeach (1973) in the form of THE VALUE CHANGE INSTRUMENT. In order to carry out the present investigation on democratic values, the researcher adapted The Value Change Instrument in the form of VALUE SELF-CONFRONTATION INSTRUMENT in which Terminal Values were replaced by Democratic Values. The instrument was adapted through the four different stages:

- **2.2.1** Stage I : Planning
- **2.2.2** Stage II : Preparing The First Draft
- **2.2.3** Stage III : Tryout
- **2.2.4** Stage IV : The Final Draft
2.2.1 Stage 1: Planning

Keeping in view Rokeach's Instrument of Value change (1973), the investigator planned to prepare the instrument in the following ways:

(i) Instrument of Value Self-Confrontation was adapted in two parts: Part-I and Part-II

(ii) Part-I aimed at seeking information about the subject's value system and the value system of another student who believes in democracy as a way of life.

(iii) In Part-II, the investigator used a group of democratic teachers as a comparison group. Because for adolescents, the group of teachers was an ideal group.

(iv) Through a questionnaire only the democratic teachers were screened and selected to form the comparison group.

(v) DEMOCRATIC VALUE SURVEY was administered to the democratic teachers in order to determine the master-ranks of each one of the 11 values.

2.2.2 Stage II: Preparing The First Draft

The first draft was prepared through the following phases.

(I) Selection of Democratic Teachers:

Initially, 60 teachers were rated as democratic in their attitude and behaviour by their students, on the basis of students responses to the four basic questions. The questions are given below.
### TELL ABOUT YOUR TEACHER———

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSES</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does he encourage you for participating in classwork?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Does he conduct classroom with active co-operation of you and your classmates?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Does he show regards for new ideas?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Does he maintain environment of mutual trust and friendship?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each teacher was rated by the 15 students of the class, he was teaching during the session. On the basis of responses by the students, the teachers were selected as democratic teachers in their attitude and behaviour. Response (Yes) carried one mark and (No) carried zero mark. In order to be treated as democratic teacher, he/she had to secure minimum 51 (85 percent of the aggregate of total of all the 15 students' marks) marks. Thus, 40 teachers were found to be selected as democratic teachers.

(2) Determination Of Master-ranks Of 11 Values :

The democratic teachers were administered the Democratic Value Survey. On the basis of their response, master-ranks for each one of 11 values were determined.

The master-ranks computed for the 11 values were interpreted in terms of first three most important values (EQUALITY, CO-OPERATION and OPENNESS), second three most important values (TOLERANCE, RESPONSIBILITY and REGARDS) and least three important values (CULTURAL PRESERVATION, SERVICE and LOYALTY).
along with the rest two (SYMPATHY and SELF-PROGRESS).

The format and flow of activity as such were retained from Rokeach's Instrument of Value change (1973). Thus, the first draft of the Value Self-confrontation Instrument was finally prepared.

2.2.3 Stage III: Tryout

The Value Self-confrontation Instrument was tried out over 80 final year pre-university class students of Pachhunga University College (N=40) and Ziritiri Womens' College (N=40), Aizawl.

Observations: The examination of the responses given over the instrument led to different inferences. Firstly, the responses to different questions over the instrument were not given completely. It was noticed that many times the students changed their responses. In some cases, responses were not marked through the scale. It indicated that the students were finding it difficult to make discrimination on eleven-point scale. Secondly, a few responded to the question in PART-II i.e. "Do you feel that your responses were somewhat hypocritical?"

Changes: On the basis of the inferences drawn from the observations, the respective changes were incorporated. Firstly, required responses in PART-I and PART-II were obtained in seven-point scale instead of eleven-point scale. Because seven-point scale was thought to be more comprehensive and functionally useful. Secondly, the question i.e. "Do you feel that your responses were somewhat hypocritical?" was dropped.

By incorporating the changes made over the first draft,
the second draft and the final draft were prepared.

2.2.4 The Final Draft

Before finalizing the instrument, it was made available to five experts for their critical appraisal and approval. The draft, improved accordingly was considered the final draft of the instrument.

(1) Description Of The Value Self-confrontation Instrument:

As a laboratory teaching strategy, the Value Self-confrontation Instrument aims at inducing possible contradiction or inconsistency between cognitions about oneself (self-conceptions) and cognitions about one's total performance (inconsistency between values that implicates self-conceptions) that may lead to a state of self-dissatisfaction and subsequently, may motivate him to bring changes in values.

The strategy consists of two parts. Part-I of the strategy exposes the individual (student, in our case) to information about his own value system and then about his friend who believes in democracy as a way of life.

On the basis of the interpretation of data previously found, Part-II draws the individual's attention to certain possible contradictions existing in the value system of the comparison group: a group of teachers who were found democratic in their attitude and behaviour. Subsequently, he is asked to compare his own ranking with the results of the comparison group. Being aware of certain possible contradictions that might exist in the comparison group and then the discrepancy between the ranking of his own and others, the individual becomes consciously
aware of certain possible cognitive contradictions that might also exist in his own belief system as related to the comparison group. It ultimately may create tension and a state of affective self-dissatisfaction regarding his self-conceptions.

In order to eliminate or at least to reduce the experimentally induced affective self-dissatisfaction, the individual recognises his guiding value system to make it more compatible with his self-conceptions. The copy of the instrument has been enclosed with the Appendix - B.

(2) Validation :

The Value Self-confrontation Instrument was administered over 50 final year pre-university students of Aizawl Government College, Aizawl in order to determine its validity. The content validity was analysed in order to determine the effectiveness of the strategy. The validity was determined in terms of answer to two different questions of the instrument given in Part - II.

Seventy-five percent subjects viewed that they strongly agree with the interpretations made about the master-rank order of importance to the 11 values, sixteen percent were not able to decide and only nine percent disagreed. It showed that the interpretations were well understood by the subjects.

Similarly out of 50 students, twenty percent were found extremely satisfied, seventy percent were extremely dissatisfied and only ten percent were between extreme satisfaction and extreme dissatisfaction about their ranks assigned to the 11 values. It reveals that the Value Self-confrontation Instrument
has successfully induced the state of self-dissatisfaction.

2.3 ADAPTATION OF VALUES CLARIFYING INSTRUMENT

The Clarifying-response as a strategy translates values clarification theory into actual practice via seven sub-processes of valuing (Raths et al., 1978). This strategy was not borrowed as such in the form of a chart (Raths et al., 1978) because of the following reasons:

(i) No doubt responses are appropriate for the seven components of valuing process, but there is no sequential link among them.

(ii) Responses are general type of questions. Some are general to affirm choices, some to stimulate reflection in a more general sense and others are to direct to one's ideas.

(iii) Responses are open-ended in the sense that they are mostly directed towards one or more value indicators like goals or purposes, aspirations, attitudes, interests, feelings, beliefs or convictions, activities, worries and problems or obstacles.

(iv) The suitability of the response was not examined over Indian population.

So, the Clarifying-response in the form of an instrument was designed through four different stages.

2.3.1 Stage I: Preparation of the first draft
2.3.2 Stage II: Cycle of modifications
2.3.3 Stage III: The Final Draft
2.3.4 Stage IV: Validation

2.3.1 Stage I: Preparation Of The First Draft

Keeping in view the essential elements of an effective
Clarifying-response and the clarifying responses suggested by the seven valuing processes, the first draft of the VALUES CLARIFYING INSTRUMENT was prepared. The draft was designed by incorporating the following ideas:

(i) Keeping in view the essential elements, the responses were made. They were specific to each component of valuing and were written in a sequential order at least in each component of valuing.

(ii) After going through the Democratic Value Survey, the responses were directed towards either to the most or the least important value verbally expressed by the subject. It was, thus, only the subjects' awareness about their own values that invited the use of clarifying responses.

(iii) Responses were aimed at encouraging subjects to look at their own values as ranked in accordance with their preferences.

(iv) Responses were aimed at helping subjects to clarify some of their confusions, if, at all, they have about the values they ranked.

(v) Responses were designed and tried out over the final year pre-university class students in Aizawl.

The copy of the first draft has been given in the Appendix - C1.

2.3.2 Stage II: Cycle Of Modifications

The first draft was tried out three times. The specific changes made over each tryout have been given below.

(1) First Tryout:
The first draft of the Values clarifying Instrument was administered over the final year pre-university class students (N=40) of Pachhunga University College, Aizawl.

**Observations**: On the basis of observations made over the subjects the following inferences were drawn:

(i) The subjects were not attentive rather they were indifferent about the situation where they were requested individually to express verbally the most or the least important value of the Democratic Value Survey.

(ii) It was noticed that the basic purpose of the strategy was missing, because the clarifying responses were directed only either to the most or to the least important value.

(iii) Subjects were confused when they were asked about "this value" or "that value" by pointing out the value on the Democratic Value Survey.

(iv) Subjects expressed their feeling of uneasiness when they were asked to define a particular word in the value statements.

(v) Most of the subjects failed to define "word" given in the value statements.

**Changes**: On the basis of above observations the following respective changes were made:

(i) It was decided to administer Democratic Value Survey individually to the subjects. So that they can complete the Survey according to the instructions. It was through the process of assigning ranks to the values, the subjects complete attention can be ensured. Thus, it was decided to give a concrete shape to the instrument by including two different steps, namely, Step I: Becoming aware of one's
own values and step II: Choosing, prizing and acting upon values. Accordingly, the second sentence of the first paragraph i.e. "This strategy in the form of an instrument contains some responses" was changed to another sentence i.e. "The strategy in the form of a VALUES CLARIFYING INSTRUMENT (V.C.I.) has been organised to be carried out through two different informal steps".

(ii) It was decided to apply responses both to the most and least important values. It will enable subjects to help themselves for getting clarification. Accordingly, the third sentence of the instrument's first paragraph - "They can be put into practice following the subject's verbal response given individually in terms of either the most or the least important value on the Democratic Value Survey" - was modified to "Here, at this stage, clarifying responses touching anyone or more sub-processes of valuing process will be directed to the most and the least important values" and placed as the last sentence of the first paragraph of the step II.

(iii) In the response no. 1 of B-sub-process, the clause "this value is more important than that" was changed to "value no.1 is more important than value No.2".

(iv) The term "word" was replaced by the appropriate term "value" in the response no.1 of C-sub-process.

(v) Response no.2 (ii) of C-sub-process - "Can you define that words" - was replaced by "what do you understand by that value?"

On the basis of suggestions by the supervisor, the following changes were made:
(i) In order to make the response no.1 of D-sub-process appealing, the clause - "in this manner" - was eliminated.

(ii) The term "ranking" was replaced by "values" and "actions" by "activities" in response no.1 and 2(ii) of E-sub-process and response no.2 of F-sub-process.

(iii) Response no.2 of G-sub-process was made more clear by the additional clause - "to implement this value".

(iv) Two concrete examples of noncommittal and honest phrases, namely, "Nice talking to you" and "I hear what you say and I do appreciate how you feel" were added in the concluding paragraph of the Step II for comprehension. Decision of new ideas in this paragraph were borrowed.

(v) New addition over the Step I and the first sentence of the first paragraph in Step II were developed on the basis of the observations.

The first draft of Values Clarifying Instrument in its modified version was treated as second draft (Appendix-C$_2$) and was considered ready for second tryout.

(2) Second Tryout:

The second draft of Values Clarifying Instrument was administered over a group of 20 final year pre-university class students of Pachhunga University College and Ziritiri Womens' College, Aizawl.

**Observations**: The following inferences were drawn on the basis of experiences gathered through observations:

(i) It was noticed that students known to the investigator co-operated well and responded with enthusiasm than the unknown ones.

71
(ii) A few students expressed their inability to explain a particular value when response no.1 of C-sub-process was made available to them individually.

(iii) Answer to the response no.1 of D-sub-process (I am not proud, why should I be proud) indicated that the students are perhaps confused with the response.

(iv) Almost all students did not respond to the response no.2 of D-sub-process.

(v) Response no.1 of E-sub-process elicited a particular answer i.e. no.

(vi) Only a few students asked the meaning of "mind" when the response no.2 of E-sub-process was made available to them.

**Changes:** Based upon the inferences referred above, the following changes were made:

(i) It was decided to establish healthy rapport with the subjects by asking them about their names, hobbies, likes or dislikes. Thus, "Establishing Rapport" was introduced as a first step in the instrument. The description here was made on the basis of observations. Accordingly, "Becoming aware of one's own Values" and "Choosing, Prizing and Acting upon Values" were regarded as second and third steps respectively.

(ii) The response no. 1 of C-sub-process - "Can you explain this value?" - was replaced by "What do you mean by this value?". Accordingly, the other two responses of this sub-process i.e. no.2 (i) and no.2(ii) no longer remained valid. Thus, they were eliminated.

(iii) The clause - "really proud of ranking" - was replaced by "glad about the ranking of" in response no.1 of
D-sub-process.

(iv) Response no.2 of D-sub-process was dropped.

(v) Response no.1 of E-sub-process was also dropped. Following the inclusion of a new response, the clauses "if yes" and "if no" of response no. 2 (i) and 2 (ii) were changed to "if personally preferred" and "if most people prefer these values that way" respectively. Secondly, the clause - "they believe in this way" - was changed to "most people should prefer those values that way" in response no.2 (i) of E-sub-process.

(vi) The term "mind" was changed to "Like" in response no.2 (ii) of E-sub-process.

(vii) Response no.1 of F-sub-process was dropped. Following the inclusion of new response in two alternative forms as no.1 of F-sub-process, response no.2 - "can you give some example about those of your activities ?" - was modified to "can you cite some of your activities which reflect your value ?"

The supervisor suggested the following changes:

(i) Some responses were written in their modified versions, keeping in mind the flow of language. The response no.1 of B-sub-process - "Would you mind telling me a reason how value no.1 is more important than value no.2 ?" - was changed to "Are there some reasons for ranking this particular value as no. 1 ?" The clause - "often do you implement" - was changed to "frequently do you incorporate" in response no.1 of G-sub-process. Response no.2 of G-sub-process - "Do you have any plan in future to implement this value ?" - was modified to "Is there any plan to do anything more in this respect in near future ?"
(ii) It was decided to systematise the model clarifying responses in terms of both the main response (at least one) and the supplementary responses (at least two) in the form of chart under Step III. It raised two important questions, which alongwith their answers are given below:

Q.1. Should each model clarifying response in both main and supplementary categories be independent from others?
A. In order to develop a global outlook, the "supplementary responses" should follow the "main response".

Q.2 Should both the main and supplementary responses of one sub-process be linked with each response included in the rest sub-processes?
A. The supplementary responses should follow the main response in each sub-process of valuing independently. So that the instrument will be free from monotonous effect.

(iii) The proposal to have at least one main response and two supplementary responses in each sub-process of valuing necessitated to construct some new responses. The new responses, old and modified responses of second draft are written in each sub-process separately as given in Appendix-C2(a).

(iv) It was noticed that the spirit of values clarification was lost when responses were directed only to limited alternatives i.e. the most and the least important values. So, it was decided to direct the clarifying responses to the first three top ranked values or/and three bottom ranked values. Accordingly, in the first paragraph of Step II of
second draft, the clause - "the most and the least important values" - was modified to "the first three top values or/and the last three bottom values".

(v) Step II i.e. "Becoming aware of one's own values", was systematised. Firstly, the purpose of this step was made clear by adding up new paragraph in the beginning. Secondly, one exercise i.e. assigning ranks to the values, was introduced. The old paragraph i.e. "in this step... climate is created", became the procedure of this exercise.

(3) Third Tryout:

The modified version of second draft formed the third draft of Values Clarifying Instrument (Appendix -C_3). It was administered to the 25 final year pre-university class students of both Pachhunga University College and Ziritiri Womens' College of Aizawl.

Observations: The following inferences were made:

(i) Some students seemed to be indifferent when the response no.2(a) of A-sub-process was made available to them.
(ii) Inappropriate observation to the response no.1 of D-sub-process indicated poor communication value of the response.
(iii) It was observed that the students were confused with the response no.1 and 3(b) of E-sub-process.
(iv) There was no answer to the response no.1(a) of F-sub-process.
(v) The meaning of the word "incorporate" in the response no. 1 of G sub-process was asked to be clarified by some students.
Changes: On the basis of the above observations the corresponding changes were made as given below:

(i) The response no. 2(a) of A-sub-process - "Were they your free choices?" - was made more directional by a modified version - "Did you choose them freely without any pressure of consideration?"

(ii) The response no.1 of D-sub-process - "Are you glad about the ranking of the values?" - was modified to "Are you happy on assigning the specific ranks to the particular values?"

(iii) Corresponding to the third inference two changes were made. Firstly, the response no.1 i.e. "Are you saying that you believe in this value?", was changed by another response i.e. "Do you tell your friends that you uphold the particular value?". Secondly, the clause - "most people will always believe in those values" - was changed to 'they always do so" in the response no.3(b) of E-sub-process.

(iv) The response no.1(a) of F-sub-process was dropped.

(v) The word "incorporate" was replaced by the word "practice" in response no.1 of G-sub-process.

On the basis of critical analysis on the format of the instrument, the supervisor suggested to incorporate the following changes:

(i) It was decided that the instrument as a dialogue strategy has to be used orally and individually. Thus, the instrument should be a guideline for carrying out dialogues with the subjects. Accordingly, two changes were made.

a- The name "Values clarifying Instrument" was modified to "Guidelines for Values Clarifying Instrument", 

76
shortly known as VCI.

b- The use of this instrument was made clear by adding up a single line i.e. "it will be used by the investigator individually and orally", below the main heading of the instrument.

(ii) The clause - "organised to be carried out" - was changed to an appropriate clause - "designed to be implemented" - in the second sentence of the first paragraph of the instrument.

(iii) The first paragraph of Step II i.e. "the climate ... value is", was simplified in its modified version as "The climate of healthy rapport leads to creation in each subject an awareness of what he/she values. It also indicates relatively how important each value is".

(iv) The words "free" and "accepting" seemed to be contradictory. So, the clause - "a free and accepting climate" - was changed to "a mutually accepting climate" in the last sentence of the paragraph under "procedure" of Step II.

(v) The second paragraph of the step III i.e. "Some model... in the form of a chart", was simplified to "The clarifying responses consist of one main and minimum two supplementary responses. The responses for each one of the seven subprocesses of valuing are given below in the form of a chart".

2.3.3. Stage III: The Final Draft

After making the necessary changes over the third draft on the basis of observations during third tryout, the fourth draft of the instrument (Appendix - C4) was ready. Before use,
the instrument was further analysed. Some minor changes were made in terms of smoothness of language as given below:

(i) The clause of response no.2(a)(ii), 2(b) and 2(b)(ii) of A-sub-process - "for ranking the values" - was changed to "to rank the values, the way you did".

(ii) The response no.2(a)(i) of B-sub-process i.e. "Would you like telling me", was made clear by its modified version i.e. "Would you like telling me the reason?"

(iii) The response no.3 of C-sub-process - "In what way do you think this value will be helpful to you?" - was modified to "What way you think, will this value be helpful to you?"

(iv) The response no.3 of D-sub-process - "Is that value really very important to you?" - was modified to "Do you think that the values are really as important as you have ranked them?"

(v) The response no.2 of F-sub-process - "Do you do really that or are you just telling?" - was corrected to "Do you really do that or you are just talking?"

After incorporating the above mentioned changes, the draft of the Guidelines For Values clarifying Instrument was finalised.

(1) **Description of Values Clarifying Instrument:**

The Clarifying-response strategy in the form of Guidelines For The Values Clarifying Instrument was adapted from Raths et al. (1978). The purpose of this strategy is to set a mood by stimulating gently one's thoughts about his value system.
The Clarifying-response as a dialogue strategy operates through the three different steps. First step is "Establishing Rapport" which initiates informal conversation for building up a rapport between the clarifier and the subject.

Second step is "Becoming aware of One's Own Values". In this step the subject is served with a Democratic Value Survey and is requested to rank the values in terms of importance as guiding principles in his life. By doing so, he becomes aware of his own value system.

In the Step - III (Choosing, Prizing and Acting Upon Values) the subject is conducted through the valuing process with the help of clarifying responses. Clarifying responses touching one or more sub-processes of valuing are directed to the first three top values and/or the last three bottom values. The copy of the instrument has been given in the Appendix - C.

(2) Validation:

In order to examine the efficacy of Values Clarifying Instrument, 40 final second year students of pre-university classes were first served with the Democratic Value Survey as a pre-test measure. Each one of the students was exposed individually to the clarifying-response strategy. After a gap of one week the same Democratic Value Survey was administered to them as a post-test measure. On the basis of obtained pre-test and post-test ranks, the normalized master-ranks were calculated for the 11 values which have been recorded in the Table 2.2.
Table No. 2.1
Master-ranks of 11 values for students (n=40) in both Pre-test and Post-test measures

<table>
<thead>
<tr>
<th>SI.No.</th>
<th>Values</th>
<th>pre-test</th>
<th>post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regards for the dignity of individual</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Equality of status and opportunity</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Sympathy with everyone</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Openness to reason</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>5</td>
<td>Tolerance for Differences in opinions</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Responsibility</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>Co-operative decision-making</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Cultural preservation</td>
<td>9</td>
<td>10.5</td>
</tr>
<tr>
<td>9</td>
<td>Service for needy and depressed</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>Loyalty to authority</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>Self-progress</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

The master-ranks reported in the above table shows that there were substantial changes in ranks over the values: EQUALITY, SYMPATHY, OPENNESS, CO-OPERATION and LOYALTY TO AUTHORITY. It reveals the effectiveness of the Values Clarifying Instrument.

2.4 ADAPTATION OF VALUE-RELATED BEHAVIOUR PROBLEM DEVICE

In order to identify two value-related behavioural types viz, overconforming adolescents and inconsistent adolescents it was thought to adapt the informal measure of Raths et al. (1978) in the form of a VALUE-RELATED BEHAVIOUR PROBLEM DEVICE (V.B.P.D.). This device primarily aimed at helping subjects rating themselves on both the value-related behaviours. But with the apprehension of much subjectivity through this self-rating form, it was decided to adapt another
two parallel measures with the help of which the same subjects can be rated by their peers and teachers. The measures are said to be parallel as they measure only two types of behaviours i.e. overconformity and inconsistency. A combined score yielded through self-rating, peer-rating and teacher-rating forms can identify subjects with overconforming and inconsistent behaviours with precision.

The adaptation of Value-related Behaviour Problem Device in its three different forms have been described below:

2.4.1 V.B.P.D. (Self-rating)
2.4.2 V.B.P.D (Peer-rating)
2.4.3 V.B.P.D (Teacher-rating)
2.4.4 The Final Draft of V.B.P.D

2.4.1 V.B.P.D. (Self-rating)

The self-rating form of Value-related Behaviour Problem Device was not adapted as such, because it appeared to be lacking in objectivity for identifying subjects with overconforming and inconsistent behaviours. In order to raise the level of objectivity, this device was adapted through three different stages.

2.4.1.1 Stage I: Preparation
2.4.1.2 Stage II: Modifications
2.4.1.3 Stage III: The Final Draft

2.4.1.1 Stage I : Preparation:

The first draft of self-rating form was initially adapted with the three items: X, Y and Z. First two items in the form of two paragraphs were directly picked up from the
informal measure of Raths et al. (1978). The changes incorporated in this form are as follows:

(i) The two questions (a. What students are VERY MUCH like this ? and b. what students are SOMEWHAT like this ? ) which followed the items X and Y, were not found suitable for the purpose at hand. So, both the questions were replaced by a single question with two alternatives. The question alongwith its alternatives was as follows:

How much do you like the above description ?

(a) very much
(b) somewhat

(ii) The third item Z was prepared as a control item for both X and Y. It was framed in such a way that in case of disparity between the information obtained from X and Y and the information over Z, the student who supplied information was rejected.

(iii) Separate ANSWER SHEET was developed for the device. The copy of the first draft with its answer sheet has been attached with Appendix - D₁

2.4.1.2 Stage II : Modifications:

The self-rating form of the device was modified twice before the finalization of the draft.

(1) First modification :

The self-rating form in its first draft was open for critical analysis. The discussion resulted in various changes. Firstly, it was decided to know one's agreement than one's liking about the overconforming and inconsistent behaviours. So the question - "How much do you like the above description ?" - that
followed both the items of X and Y was modified to "How much do you agree with the above description?". Accordingly two supplied type of responses i.e. (a) very much and (b) somewhat, to each question under the items X and Y were replaced by five responses viz, (a) agree, (b) tend to agree, (c) can not say, (d) tend to disagree and (e) disagree. Secondly, the third item Z was substantiated by an additional clause i.e. "in order of their accuracy as your self-description". Thirdly, following above changes over items, required minor changes were only made in the second paragraph of INSTRUCTIONS and in the items X and Y of ANSWER SHEET.

The second draft of self-rating form was prepared on the basis of the above modification. The copy of second draft alongwith its answer sheet has been given in Appendix - D2.

(2) **Second modification**:

The second draft of self-rating form was administered to 20 final year pre-university students of Pachhunga University College, Aizawl.

**Observations**: On the basis of observations, it was noticed that not a single student answered to the third item i.e. Z.

**CHANGES**: On the basis of observations, item Z - "Which paragraph (either X or Y) is most important to you in order of their accuracy as your self-description?" - was changed to "Which paragraph (either under the item 'X' or 'Y') is most important and which paragraph is least important to you in order of their accuracy as your self-description?". Accordingly, the alternative "(a) paragraph X" and "(b) paragraph Y" were changed.
to " X. i. Most important
   ii. Least important
Y i. Most important
   ii. Least important "

The supervisor suggested to change the supplied type of responses to both X and Y items in five-point scale to most commonly accepted seven-point scale. Accordingly, the five alternatives viz, agree, tend to agree, can not say, tend to disagree and disagree were changed to seven alternatives viz, strongly agree, agree, tend to agree, can not say, tend to disagree, disagree and strongly disagree.

Following changes made over observations and the supervisor's suggestion, required minor modifications were made in second and third paragraph of INSTRUCTIONS and ANSWER SHEET. The copy of the final draft alongwith answer sheet has been given in Appendix-D3.

2.4.1.3 Stage III : The Final Draft :

The final draft was made ready for administration after the necessary modification over the second draft of self-rating form.

(1) Description of the self-rating form :

The self-rating form of V.B.P.D. aims at getting opinions from students themselves (subjects under study) on certain traits observed in their daily behaviour. It consists of two main items in terms of two separate paragraphs and one supplementary item. First two items viz, X and Y depict about
overconforming and inconsistent behaviours respectively. Each item contains a common question separately to be answered in a seven-point scale ranging from "strongly agree" to "strongly disagree". The third item Z contains only one question which aims at knowing as to how accurately the subject answers the first two main items. It, thus, serves as a control item. The copy of final draft along with its answer sheet is given in Appendix-D.

(2) Scoring of the self-rating form:

The self-rating form contains three items viz, X, Y and Z. The item Z serves as a control item to the former two items.

Item X carries seven alternatives on a seven-point scale. Corresponding to the serial number of alternatives as a, b, c, d, e, f and g the given values are 7, 6, 5, 4, 3, 2 and 1 respectively. The obtained score for each item, thus, varies with minimum of one (strongly disagree) to a maximum of seven (strongly agree). However, any subject selecting alternative 'd' is subject to rejection because of indecisive response. Item Y follows the same scoring procedure like that of X.

For item Z, it presumes that any subject selecting any one alternative except 'd' in either X or Y item should mark a tick (right mark) against the first alternative i.e. most important of either X or Y under item Z. In case of variation, the individual is subject to delineation.

On the basis of the above stated scoring procedure, separate Final Self-rating Score (FSS) for each overconforming and inconsistent behaviour can be obtained.
2.4.2 V.B.P.D (Peer-rating)

The peer-rating form of Value-related Behaviour Problem Device was adapted through two different stages.

2.4.2.1 Stage I: Preparation
2.4.2.2 Stage II: The Final Draft

2.4.2.1 Stage I: Preparation:

The final draft of Value-related Behaviour Problem Device in its self-rating form was simply duplicated into peer-rating form. For this, some minor changes were made. The changes made are recorded as follows: (i) First two items X and Y were re-formed with changes in nouns and verbs, so that these items can be used suitably by the students for rating their friends on the same types of behaviour: overconformity and inconsistency. (ii) Third item Z was completely changed in the form of a new question i.e. "To what extent you feel your answer is reliable about your classmates?" But it served as a control item like that in the Self-rating form. The response to this question may be given by choosing only one out of the total number of three alternatives: "To a greater extent, To some extent and Indefinite". (iii) Both the ANSWER SHEET and INSTRUCTIONS were modified in accordance with the above stated changes over the items.

2.4.2.2 Stage II: The Final Draft:

After incorporating the changes as stated above, the final draft was prepared.

(1) Description of the peer-rating form:
The peer-rating form of V.B.P.D. aims at getting opinions from classmates on certain traits observed in the behaviour of a single subject. Like the self-rating form, it contains the same number of items. The items X and Y depict about overconforming and inconsistent behaviours respectively. The item Z which serves as a control item aims at knowing to what extent the answer given by the classmate is reliable. The copy of the form along with its answer sheet has been attached with the Appendices No. D4.

(2) Scoring of the peer-rating-form:

Peer-rating form follows the same scoring procedure like that of self-rating form for X and Y items. Any subject responding to the third alternative i.e. indefinite, of the Z item is subject to delineation because of indecisive nature of response.

In the present study, each selected introvert and extravert was rated by the three classmates. Thus, the final peer-rating scores for the said subject on two types of behaviours were obtained separately by averaging three independent scores i.e. First peer-rating Score (PS1), Second Peer-rating Score (PS2) and Third Peer-rating Score (PS3).

2.4.3. V.B.P.D (Teacher-rating)

The informal measure in the form of a chart was given by Raths et al. (1978) to be used by the teachers for measuring the degree of value-related behaviour problems. In order to measure both the overconformity and inconsistency value-related behaviours, the investigator did not use it as such due to the various reasons. Firstly, it contains items for collecting
information about eight value-related behaviours rather than the two. Secondly, both the scales viz, acuteness and frequency aim at measuring both trait and behaviour of value-related behavioural types. But, the investigator aimed at measuring only behaviour. Thirdly, both the scale are not in right proportion due to variation in degree they aim at measuring.

In order to measure the overconforming and inconsistent behaviours, the investigator designed an instrument in the form of VALUE-RELATED BEHAVIOUR PROBLEM DEVICE (V.B.P.D.) through the three different stages:

2.4.3.1 Stage I : Preparation
2.4.3.2 Stage II : Modifications
2.4.3.3 Stage III : The Final Draft

2.4.3.1 Stage I : Preparation:

On the basis of the above cited reasons, the first draft of the V.B.P.D. in teacher-rating form incorporated the following ideas: (i) both the scales viz, frequency and acuteness aimed at measuring only two types of value-related behaviours (overconformity and inconsistency); (ii) items were arranged on the basis of frequency scale and acuteness scale which measure both the behaviours; (iii) ten-point frequency scale and six-point acuteness scale were reduced to five-point scale each in order to make them comparable proportionate to each other; (iv) direction to the items were made clear and (v) a copy of ELABORATE MEANING OF VALUE-RELATED BEHAVIOURAL TYPES was attached with the device.

Every teacher has to rate a number of students. So, it
was decided to write-down a separate REQUEST LETTER containing the names and roll numbers of students to be attached with the device. The preliminary draft of the teacher-rating form was prepared (Appendix-D) and was made available for tryout and modification.

2.4.3.2. Stage II : Modifications :

The preliminary draft of V.B.P.D. of the teacher-rating form followed a cycle of modifications. The draft was tried out and on the basis of tryout experiences, the specific changes were made.

The preliminary draft of the teacher-rating form was given to the five experts for their observations and suggestions on the format of the device.

Observations : The experts suggested that (i) the items should be simplified in order to make them more appealing to the teachers; and (ii) five-point frequency scale and acuteness scale should be converted into seven-point scale.

Changes : On the basis of the comments of experts, various changes were incorporated. Firstly, two separate items on inconsistent and overconforming behaviours were placed separately under both the frequency and acuteness scales. Secondly, five-point scale was changed into seven-point scale. Accordingly, the five alternatives (never, several times monthly, several times weekly, several times daily and always) were changed into seven choices (never, once in a month, fortnightly, weekly, once daily, several times day and always) under the frequency scale. In case of acuteness scale, the five choices (not at all, extremely mild, mild, acuteness and extremely acute) were transformed into seven
alternatives (not at all, very very mild, very mild, mild, acute, very acute and very very acute).

The modified version of the preliminary draft of teacher-rating form was treated as scored draft (Appendix - Dg) and was made ready for tryout.

(2) Tryout:

The modified draft of teacher-rating form was administrated to ten college teachers who were considered as experts as well as raters. Each of them was requested to rate a group of ten students.

Observations: The teachers suggested that the name and department of the teachers should be kept secret.

Changes: On the basis of the experts' comments, the name and department of teacher were eliminated from the device.

2.4.3.3. Stage III: The Final Draft:

Incorporating the above change, the second draft was modified and the final draft was prepared.

(1) Description of the teacher-rating form:

Unlike peer-rating form, teacher-rating form of V.B.P.D. aims at getting opinions from teachers on certain traits observed in the daily behaviour of students.

The teacher-rating form consists of seven-point frequency scale and seven-point acuteness scale containing two items each. First item of each scale measures consistent behaviour and second item measures overconforming behaviour. The
copy of the Final draft has been given in Appendix - D.

(2) Scoring of the teacher-rating form:

The seven-point frequency scale and seven-point acuteness scale of teacher-rating form contain two items each. The given choices of both items under frequency scale ranges from "never" to "always" with their corresponding scores form 1 to 7. Similarly, the given choices of both items under acuteness scale ranges from "not at all" to "very very acute" with their corresponding scores from 1 to 7. Thus, for all the four items the minimum score is 1 and the maximum score is 7.

First item under each scale measures inconsistent behaviour while, second item measures overconforming behaviour. Thus, it is possible to get two separate scores i.e. Frequency Score (FS) and Acuteness Score (AS) for each behaviour. In order to assign a single score to both behaviours by a single teacher i.e. Single Teacher-rating Scores (S.T.S), the sum of two separate frequency and acuteness scores are averaged.

In the present study, each selected introvert and extravert were rated by two independent teachers. Thus, the Final Teacher-rating Score (FTS) on both overconforming and inconsistent behaviours were obtained from first teacher and second teacher. The formula for finding out score for each behaviour is given below:

$$FTS = \frac{STS_1 + STS_2}{2}$$

where, $STS_1 =$ First Single Teacher-rating Score and $STS_2 =$ Second Single Teacher-rating Score.
2.4.4 The Final Draft Of V.B.P.D.

The final draft of Value-related Behaviour Problem Device was ready for administration by incorporating the final drafts of self-rating form, peer-rating form and teacher-rating form.

(1) Description of the V.B.P.D:

The Value-related Behaviour Problem Device consists of self-rating form, peer-rating form and teacher-rating form. All these three forms measure only two value-related behavioural types viz, overconformity and inconsistency. The copy of V.B.P.D including the three forms has been given in the Appendix - D.

(2) Scoring of the V.B.P.D.

The V.B.P.D gives Final Score (FS) on overconforming and inconsistent behaviours separately. In order to obtain independent score for each behaviour, the Final Self-rating Score (FSS), Final Peer-rating Score (FPS) and Final Teacher-rating Score (FTS) are averaged to get independent score on overconformity and inconsistency for the selected introverts and extraverts.

2.5 Kundu Introversion Extraversion Inventory (K.I.E.I.)

Kundu Introversion Extraversion Inventory (1976) (Appendix - E) was used to obtain reliable measure of introversion-extraversion dimension of adolescent's personality.

2.5.1 Description:

The inventory consists of 70 items with uneven number of response choices divided into five blocks. According to the
scoring principle, the maximum possible score for this inventory is 241 and 70 is the minimum possible score. Low raw scores indicate extraversion and high scores indicate introversion. For this inventory, any individual securing raw scores between 131 to 171 may be considered as neither extravert nor introvert.

The split-half reliability coefficients were .64, .82, .60, .66, and .89 and odd-even reliability coefficients were .79, .76, .86, .41 and .66 for different blocks like A, B, C, D and E respectively. The total test split-half reliability coefficient and odd-even reliability coefficient were .82 and .71 respectively. The whole test reliability coefficient of Cronbach was found to be .73.

The validity coefficients were .41, .77, .42, .55 and .49 for blocks A, B, C, D and E respectively. The validity coefficient was -.47 against introversion-extraversion score of Eysenck Personality Inventory. It was negative as in Eysenck Personality Inventory the increasing order of score corresponds to the increased degree of extraversion, whereas in KIEI the order is reverse. The copy of KIEI has been given in Appendix-E.

2.5.2 Scoring:

The answer sheets completed in all respects are scored as per the prescribed procedure given in the test manual. There is no scoring key. The design of the answer sheet facilitates the scoring in the following manners:

(i) Count the tick (right) marks in each row and enter the figure under the column T against the respective row.

(ii) Multiply these totals (Ts) in the following order:

93
(iii) Enter the products under the column S against the respective row.

(iv) All the entries in column S are added together to get the total introversion-extraversion score at a time.

(v) Find out the C-scale value from the table 5 of the test manual in order to determine the position of the individual tested.